

### **ABSTRACT OF THE INVENTION**

The present invention relates generally to peptides derived from the natural cytotoxicity receptors on natural killer (NK) cells and to antibodies against peptide epitopes on these receptors. In particular, the present invention identifies an essential epitope in the proximal domain of NKp46 and NKp44 receptors present on NK cells, as a crucial element for the binding to viral-infected cells. The present invention provides peptides that are derived from the amino acid sequence of NKp46 receptor, capable of specific targeting of viral-infected cells and tumor cells and monoclonal antibodies which recognize a specific domain of NKp46. The present invention further provides hyperglycosylated peptides that are derived from the NKp44 receptor, capable of specific targeting of viral-infected cells.